(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 18 September 2003 (18.09.2003)

(10) International Publication Number WO 03/076612 A1

(51) International Patent Classification7: C12N 15/09, 15/82, A01H 5/00, C07K 14/415

(21) International Application Number: PCT/EP03/02629

(22) International Filing Date: 10 March 2003 (10.03.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/363,125

11 March 2002 (11.03.2002)

- (71) Applicants (for all designated States except US): DLF TRIFOLIUM A/S [DK/DK]; Hoejerupvej, P.O. Box 19, DK-4660 Store Hedding (DK). RISOE NATIONAL LABORATORY [DK/DK]; P.O. Box 49, DK-4000 Roskilde (DK).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): NIELSEN, Klaus, K. [DK/DK]; Nebbegaardsbakken 9, DK-2400 Copenhagen NV (DK). JENSEN, Christian, Sig [DK/DK]; Moltkesvej 61, 2th, DK-2000 Frederiksberg (DK). GAO. Caixa [DK/DK]; Maglekaeret 37B, DK-2680 Solroed Strand (DK). SALCHERT, Klaus [DE/DE]; Steinberg Strasse 16, 06507 Gernrode (DE).

- (74) Agents: MACDOUGALL, Donald, Carmichael et al.: Cruikshank & Fairweather, 19 Royal Exchange Square, Glasgow G1 3AE (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR. LS. LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF REPRESSING FLOWERING IN A PLANT

(57) Abstract: The isolation and function of a plant LpTFL1 from Lolium perenne (perennial ryegrass) are described, along with generation of transgenic Arabidopsis, ryegrass, and red fescue plants. The gene prevents or represses flowering of transgenic plants. Methods for using the gene to repress or prevent flowering are described.